

108TH CONGRESS
1ST SESSION

S. 915

To authorize appropriations for fiscal years 2004, 2005, 2006, 2007, and 2008 for the Department of Energy Office of Science, to ensure that the United States is the world leader in key scientific fields by restoring a healthy balance of science funding, to ensure maximum use of the national user facilities, and to secure the Nation's supply of scientists for the 21st century, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 11, 2003

Mr. ALEXANDER (for himself, Mr. LEVIN, Mr. WARNER, and Mr. BINGAMAN) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

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1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Energy and Science
3 Research Investment Act of 2003”.

4 **SEC. 2. FINDINGS.**

5 Congress finds that—

6 (1) the Office of Science of the Department of
7 Energy is the largest Federal sponsor of civilian re-
8 search in the physical sciences and plays a major
9 role in supporting interdisciplinary research that
10 contributes to other scientific fields, including the
11 life sciences, mathematics, computer science, engi-
12 neering, and the environmental sciences;

13 (2)(A) Department of Energy laboratories have
14 scientific capabilities that are unmatched in typical
15 academic or industrial institutions;

16 (B) scientific teams of the laboratories are ca-
17 pable of developing integrated approaches to grand
18 scientific challenges that are often beyond the reach
19 of individual experimenters; and

20 (C) the Human Genome Project exemplifies
21 that capability;

22 (3) the facilities at the Department of Energy
23 laboratories are invaluable to scientists across dis-
24 ciplines, including those from academia, industry,
25 and government;

1 (4)(A) for more than half a century, science re-
2 search has had an extraordinary impact on the econ-
3 omy, national security, medicine, energy, life
4 sciences, and the environment; and

5 (B) in the economic arena, studies show that
6 about half of all United States post-World War II
7 economic growth is a direct result of technological
8 innovation stemming from scientific research;

9 (5) the Office of Science programs, in constant
10 dollars, have been flat funded for more than a dec-
11 ade, placing the scientific leadership of the United
12 States in jeopardy and limiting the generation of
13 ideas that will enhance the security of the United
14 States and drive future economic growth;

15 (6)(A) because the cost of conducting research
16 increases at a faster rate than the Consumer Price
17 Index, flat funding for the Office of Science has led
18 to a decline in the number of grants awarded, stu-
19 dents trained, and scientists supported; and

20 (B) flat and erratic funding has also led to an
21 underuse of the facilities that the United States has
22 invested hundreds of millions of dollars to construct;
23 and

24 (7) higher funding levels for the Office of
25 Science will provide more opportunities to support

1 graduate students in research at universities in the
2 fields of mathematics, engineering, and the physical
3 sciences, helping to alleviate an increasing over-reli-
4 ance on foreign talent in these fields.

5 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS FOR**
6 **SCIENCE PROGRAMS.**

7 (a) PROGRAM DIRECTION.—The Secretary of En-
8 ergy, acting through the Office of Science, shall—

9 (1) conduct a comprehensive program of funda-
10 mental research, including research on chemical
11 sciences, physics, materials sciences, biological and
12 environmental sciences, geosciences, engineering
13 sciences, plasma sciences, mathematics, and ad-
14 vanced scientific computing;

15 (2) maintain, upgrade, and expand the sci-
16 entific user facilities maintained by the Office of
17 Science and ensure that the facilities are an integral
18 part of the departmental mission for exploring the
19 frontiers of fundamental science;

20 (3) maintain a leading-edge research capability
21 in the energy-related aspects of nanoscience and
22 nanotechnology, advanced scientific computing and
23 genome research;

24 (4) ensure that the fundamental science pro-
25 grams of the Department of Energy, as appropriate,

1 help inform the applied research and development
2 programs of the Department; and

3 (5) ensure that Department of Energy research
4 programs support sufficient numbers of graduate
5 students to maintain the pipeline of scientists and
6 engineers that is critical for the future vitality of
7 Federal laboratories and overall United States
8 science leadership.

9 (b) AUTHORITIES OF APPROPRIATIONS.—There are
10 authorized to be appropriated to carry out this section—

11 (1) for fiscal year 2004, \$3,785,000,000;

12 (2) for fiscal year 2005, \$4,153,000,000;

13 (3) for fiscal year 2006, \$4,586,000,000;

14 (4) for fiscal year 2007, \$5,000,000,000; and

15 (5) for fiscal year 2008, \$5,400,000,000.

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